wherein the plate heat exchanger block includes an intermediate piece (5) between the header (3) and the heat exchange passages (2) containing the plurality of sheets, the intermediate member having a steel part facing the header and an aluminum part facing the housing, the parts having been bonded together by explosive plating.

- 15. (Amended) A plate heat exchanger block according to claim 8, wherein the sheets (2) consist essentially of aluminum or aluminum alloy and the header (3) consists essentially of steel, wherein the intermediate piece is welded, steel-to-steel, to the header and the intermediate piece is welded, aluminum-to-aluminum, to at least one of (a) the housing and (b) the corrugated sheets.
- 16. (Amended) A heat exchange header for attachment to a heat exchanger having aluminum components, the heat exchange header consisting essentially of steel and a connecting piece consisting essentially of steel on one side and consisting essentially of aluminum explosively bonded to the other side of the steel, said header being welded to the steel side of said connecting piece.

Please add the following new claims:

- 17. The plate heat exchanger block of claim 8 wherein the housing has an inlet opening of a selected area and wherein the header has a corresponding outlet area, the intermediate piece disposed therebetween also enclosing a corresponding area.
- 18. The plate heat exchanger block of claim 15 wherein the housing has an inlet opening of a selected area and wherein the header has a corresponding outlet area, the intermediate piece disposed therebetween also enclosing a corresponding area.
- 19. A method of fabricating a heat exchanger block including a housing with a plurality of plates therein and a header which is in communication with the plates within the housing, the housing and header having openings, the method comprising:

. . .



fabricating at least the plates of aluminum;

fabricating an intermediate member for positioning between the header and the plates within the housing by explosive plating aluminum and steel components together to form the intermediate member, the intermediate member having an opening and the housing and header having openings;

welding the steel component of the intermediate member to the header with the openings aligned; and

welding the aluminum component to the heat exchanger block with the openings aligned.

- 20. The method of claim 19 wherein the intermediate member is first welded to the header and thereafter the intermediate member is welded to the head exchanger block after the header attached to the intermediate member.
- 21. The method of claim 20 wherein the housing is made of aluminum and the intermediate member is welded to the housing.
- 22. The method of claim 20 wherein the intermediate member is welded to the plates.
- 23. The method of claim 19 wherein the intermediate member is first welded to the header and thereafter the intermediate member is welded to the heat exchanger block after the header attached to the intermediate member.
- 24. The method of claim 19 wherein the intermediate member is welded to the plates.

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